# Navigation Wayfinder DVL

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# Wayfinder

Doppler Velocity Log

# "A subsea vehicle that doesn't know its location has extremely limited use"

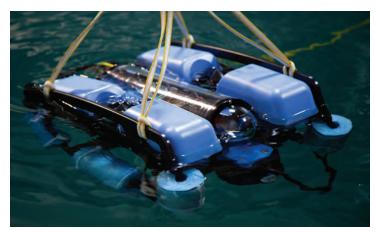
Since 1992, Teledyne RD Instruments has delivered a much-used solution to this challenge--the first high-precision Doppler Velocity Log (DVL), based on broadband signaling.

More than 5000 of these DVLs have been supplied worldwide, improving navigation and positioning of subsea vehicles of all sizes.

That experience and technology are now distilled into Wayfinder, a pocket-sized DVL designed for navigating today's smaller and more-affordable micro ROVs.

#### **Pocket-Sized Packaging**

At just 10 cm x 10 cm x 7 cm, Wayfinder is by far the smallest DVL Teledyne has ever designed, making it ideally suited for micro ROVs. Wayfinder literally puts subsea navigation in the palm of your hand.





#### **Precise Performance**

Performance matters. Wayfinder has demonstrated in the water its superior data quality compared with DVLs of similar size. Don't risk your mission's success to inferior solutions.

#### Affordable

Often, smaller vehicles mean smaller budgets, but that doesn't mean you need to compromise on technology. Wayfinder's low price enables a new generation of scientists, explorers and hobbyists to navigate micro vehicles with confidence.

#### **Proven Reliability**

Thousands of Teledyne Marine DVLs are in use on vehicles worldwide, conducting critical missions for commercial, defense and academic applications.

#### Easy to Integrate & Operate

Wayfinder has been designed for quick and easy installation and operation. With our comprehensive online support, tools and documentation, your DVL will be installed and ready to go in no time.

# How will Wayfinder Make a Difference for Your ROV operations?

#### **Reduce Costs**

- Track your position without the added expense and complexity of a Ultra Short Baseline (USBL) system
- Know your vehicle altitude without the cost and added payload of an altimeter

#### Improve Productivity

- Navigate safely, even in turbid and deep water
- Find and retrieve deployed objects more efficiently

#### **Create Better Maps and Visuals**

- Support flexible mission objectives from subsea cameras and videography to seabed mapping
- Record locations where images/photos were taken

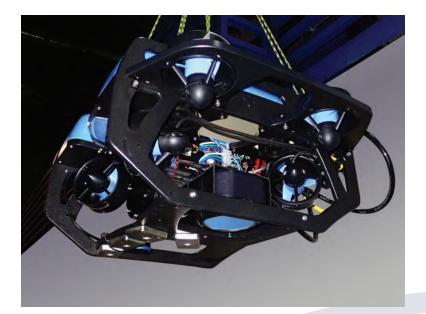
#### **Easily Integrate Onto Your ROV**

• Save valuable time and money with our easy to install DVL and fully online documentation and support.

#### **Reduce Complexity When Piloting**

- Hover and station keep your ROV with confidence
- Mark waypoints or sites for later return





### **FIND YOUR WAY**

Bridge / Dam Inspection Channel / Aqueduct Inspection Port Infrastructure & Security Ship Hull Inspection Aquaculture Tasks / Inspection Biological Research Salvage Operations Treasure Hunting Ordinance Mapping / Removal Diver Navigation Search and Rescue Recreational Operations

# Wayfinder Doppler Velocity Log

#### **TECHNICAL SPECIFICATIONS**

Data Output Velocity

# B

	Range	4 point and avg range to bottom in the sensor frame
Bottom Tracking	Maximum altitude	60 m
	Minimum altitude	0.5 m
	Velocity range	10 m/s
	Long term accuracy	±1.15%
	Velocity Standard Deviation	1.2 cm/sec
	Ping rate	16 Hz
Acoustic	Center frequency	614.4 kHz
	Number of beams	4 x 2D phased-array
Environmental	Maximum operating depth	200 m
	Operating/storage temperature	-5° C to 45° C / -30° C to 60 C
	Weight in air/water	.85 kg / .51 kg
Power	11.4-36.7V; 3W average, 25W peak; 4A max surge	
Communications	RS-232, 115200 or 9600 Baud Rate	
Cable	1 m long, 6 conductor, 6.7 mm OD, termination: pigtail	
Software (WIndows & Linux)	Wayfinder Tools Utility/Interface software; Python Driver interface	

3-axis velocity over bottom in the sensor frame





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**PRODUCT GUIDE**